What Is Claimed Is:

1. An electromechanically power-splitting hybrid drive system for a motor vehicle, having an internal combustion engine and two electric motors that are coupled by way of a transmission,
characterized by a control system (10) that, based on coupling conditions of the transmission (P1, P2, 4), calculates respective target rotation speeds ($n_{VM\ setpoint}$, $n_{E1\ setpoint}$, $n_{E2\ setpoint}$) and target torques ($M_{VM\ setpoint}$, $M_{E1\ setpoint}$, $M_{E2\ setpoint}$) for the internal combustion engine (VM) and both electric motors (E1, E2); and by a rotation speed controller (34, 36, 38) for the internal combustion engine (VM) and the two electric motors (E1, E2), which controllers compare the calculated target rotation speeds ($n_{VM\ setpoint}$, $n_{E1\ setpoint}$, $n_{E2\ setpoint}$) with the pertinent actual rotation speeds ($n_{VM\ actual}$, $n_{E1\ actual}$, $n_{E2\ actual}$) and in the case of a system deviation (e_{VM}, e_{E1}, e_{E2}) between one of the actual rotation speeds ($n_{VM\ actual}$, $n_{E1\ actual}$, $n_{E2\ actual}$) and the pertinent target rotation speed ($n_{VM\ setpoint}$, $n_{E1\ setpoint}$, $n_{E2\ setpoint}$) calculates, on the basis of the system deviation (e_{VM}, e_{E1}, e_{E2}), one or more additional torques ($M_{VM\ add}$, $M_{E1\ add}$, $M_{E2\ add}$) that are taken into account, in addition to the target torque or torques ($M_{VM\ setpoint}$, $M_{E1\ setpoint}$, $M_{E2\ setpoint}$) calculated by the control system (10), in controlling the torque of the internal combustion engine (VM) and of the two electric motors (E1, E2).

2. The hybrid drive system as recited in Claim 1,
wherein the rotation speed controller (34) of the internal combustion engine (VM) is an I, PI, or PID controller; and the rotation speed controllers (36, 38) of the electric motors (E1, E2) are P or PD controllers.

3. The hybrid drive system as recited in one of the preceding claims,
wherein the rotation speed controllers (34, 36, 38) are in each case part of a decentralized rotation speed control loop of the internal combustion engine (VM) or of the electric motors (E1, E2).

4. The hybrid drive system as recited in one of the preceding claims,
wherein the rotation speed controllers (34, 36, 38) do not communicate with one another.

5. The hybrid drive system as recited in one of the preceding claims, wherein the rotation speed controllers (34, 36, 38) communicate with the control system (10) via a bus system (40).

6. The hybrid drive system as recited in one of the preceding claims, wherein the control system (10) specifies controller parameters of the rotation speed control loops and/or an initialization of an integral component of the rotation speed control loop of the internal combustion engine (VM).

7. The hybrid drive system as recited in one of the preceding claims, characterized by a bandpass filter that is arranged before or after at least one of the rotation speed controllers (34, 36, 38).

8. A method for regulating an electromechanically power-splitting hybrid drive system of a motor vehicle, having an internal combustion engine and two electric motors that are coupled by way of a transmission, wherein based on coupling conditions of the transmission (P1, P2, 4), respective target rotation speeds ($n_{VM\ setpoint}$, $n_{E1\ setpoint}$, $n_{E2\ setpoint}$) and target torques ($M_{VM\ setpoint}$, $M_{E1\ setpoint}$, $M_{E2\ setpoint}$) are calculated for the internal combustion engine (VM) and the two electric motors (E1, E2); the respective target rotation speeds ($n_{VM\ setpoint}$, $n_{E1\ setpoint}$, $n_{E2\ setpoint}$) are compared with corresponding actual rotation speeds ($n_{VM\ actual}$, $n_{E1\ actual}$, $n_{E2\ actual}$) of the internal combustion engine (VM) and of the two electric motors (E1, E2); and in the case of a system deviation (e_{VM}, e_{E1}, e_{E2}) between one of the actual rotation speeds ($n_{VM\ actual}$, $n_{E1\ actual}$, $n_{E2\ actual}$) and the corresponding target rotation speed ($n_{VM\ setpoint}$, $n_{E1\ setpoint}$, $n_{E2\ setpoint}$), one or more additional torques ($M_{VM\ add}$, $M_{E1\ add}$, $M_{E2\ add}$) are calculated on the basis of the system deviation (e_{VM}, e_{E1}, e_{E2}) and are taken into account, in addition to the target torque or torques ($M_{VM\ setpoint}$, $M_{E1\ setpoint}$, $M_{E2\ setpoint}$) calculated by the control system (10), in controlling the torque of the internal combustion engine (VM) and of the two electric motors (E1, E2).

9. The method as recited in Claim 8, wherein the target rotation speeds ($n_{VM\ setpoint}$, $n_{E1\ setpoint}$, $n_{E2\ setpoint}$) are calculated on the basis of an accelerator pedal position, an electrical power necessary for an electrical system of the motor vehicle, and actual rotation speeds of wheels of the

motor vehicle or an actual rotation speed ($n_{AW\ actual}$) of an output shaft (AW) of the transmission (P1, P2, 4).

10. The method as recited in Claim 8 or 9, wherein the target torques ($M_{VM\ setpoint}$, $M_{E1\ setpoint}$, $M_{E2\ setpoint}$) contain components to compensate for inertias in the context of dynamic operation.